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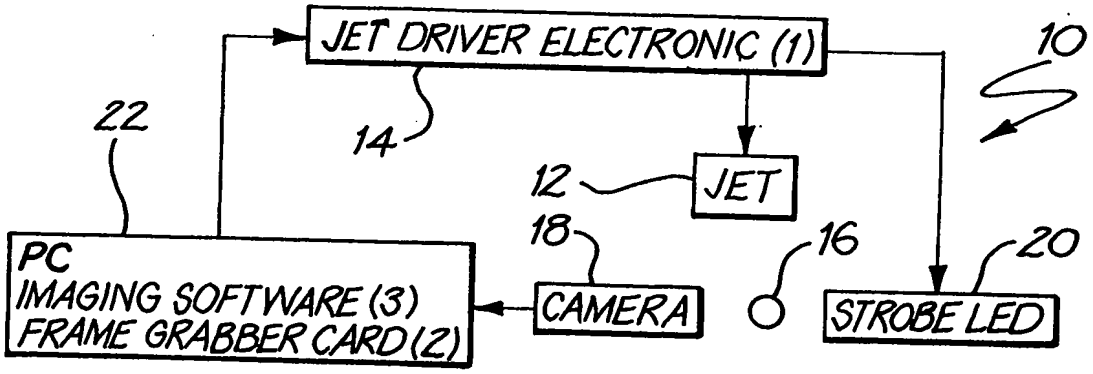
(54) Title: "SYSTEM AND METHOD FOR AUTOMATICALLY SETTING OPERATING PARAMETERS FOR MICRO-DISPENSING DEVICES"



(57) Abstract: A process for automating the *setting of parameters* for a micro jetting system for dispensing reagents and a jetting system and control system arranged to perform the process of the resent invention are disclosed. The parameters which are adjusted by the system, are voltage level and pulse duration. Typically, the process works by cycling through a plurality of combinations of the two parameters, imaging *droplets* produced by each of those parameters and bLnalysing those images to detect whether a droplet is formed, and if so, whether that droplet is suitable. In a particularly preferred approach, a statistical approach is used to generate a range of appropriate parameter combinations and an associated likelihood of each of those parameter combinations being acceptable. In particular, the selection of parameter combinations starts *with the* statistically most popular occurrence of voltage and *pulse* duration and then alternates either side of the most popular occurrence with the next most popular occurrence which has not yet been used, until in acceptable droplet is produced.

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